02

# BRUHAT BANGALORE MAHANAGARA PALIKE
## YELAHANKA ZONE

**Estimate Cost Rs. 1500000.00**

**Name of Work:** Detailed Estimate for the Work of Maintenance of Existing borewells in ward No-02 of yelahanka Sub Division.

| Sl No | Description of item | Unit | No | | | | Qty | Rate | Amount |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Supply and delivery at site brand New texmo/ innoval/ Lubi/ Sabar / Atalanta/ Calamal/ make suitable for vertical installation in 150mm dia bore well comprising of single stage or multistage CF pump close coupled by meaans of stainless steel coupling to suitable HP suitable speed totally enclosed and filled with pure drinking water (Wet type) squirrel cage submersible induction motor suitable for opertation of 3PH., 50 Hz, 380/440 volts AC supply fitted with required aqccessories such as suction, casing suction strainers sand guard Non return value etc. complete . The pump and motor shall form an integral unit with all the required fittings 12.50 HP 20 stage. **SE RDED Approved Rate** | No | | | | | | | |
| | 12.5 HP 20 Stage | | 2 | | | | 2 | 44000.00 | 88000.00 |
| 3 | Supplying of ISI marked galvanized mild steel tube (continously welded electric resistance welded (ERW) high frequency, induction welded (HFIW) Hot finished welded type of nominal bore given below screwed at both ends as per IS 554/1985 with latest amendments, pipes threaftes at one end and the other end protected asper specification in random lengths of 4 to 7 mtrs Confirming to IS 1239 part I/1990 with amendament 1-5 and with all its latest amendements if any. The pipes supplied should be with BIS mark No 3/08-09 2406/15.10.2008. **50 mm dia including Collar Heavy Class** | Rmtr | | | | | | | |
| | | | 8 | 60.00 | | | 480.00 | 325.00 | 156000.00 |
| 4 | Lifting of Submersible Pump set **(P,46/I.10.3.21 RDED SR (2002-03)** | No | 8 | | | | 8 | 750.00 | 6000.00 |
| 5 | Transportation of pumping machineries **(P.46/I.103)RDED SR (2002-03)** | No | 8 | | | | 8 | 800.00 | 6400.00 |
| 6 | **A) Repairs to Motor:**Rewinding of submersible pump sets with copper insulation wire of suitable gauge as per ISI specification with guarantee of 6months. **RDED SR (2002-03)P NO.39/ I,NO.A)** | | | | | | | | |
| | a) -Do - above 3HP upto 5HP | No | 6 | | | | 6 | 2500.00 | 15000.00 |
| | b) -Do - above 5HP upto 10HP | No | 2 | | | | 2 | 3700.00 | 7400.00 |
| | (Above 5HP upto 10HP add Rs.115/- for every 1/2 HP) | | | | | | | | |
| | **B) Replacement of Motor Parts:** | | | | | | | | |
| 7 | Above 5HP Stator (with one year Gurantee) **P.No.40/Ino.C(2)RDED SR (2002-03)** | No | 15 | | | | 15 | 4600.00 | 69000.00 |
| 8 | Above 5HP Rotor (with one year Gurantee) **P.No.40/I No.C(2)RDED SR (2002-03)** | No | 15 | | | | 15 | 4500.00 | 67500.00 |

(06)

| Sr No | Description of item | Unit | No | | | | Qty | Rate | Amount |
|---|---|---|---|---|---|---|---|---|---|
| 9 | Upper Flange P.No.40/I No.3 RDED SR (2002-03) | No | 16 | | | | 16 | 350.00 | 5600.00 |
| 10 | Lower Housing P.No.40/I No.4 RDED SR (2002-03) | No | 16 | | | | 16 | 575.00 | 9200.00 |
| 11 | Lower Flange P.No.40/I No.5 RDED SR (2002-03) | No | 20 | | | | 20 | 350.00 | 7000.00 |
| 12 | a) Carbon Housing P.No.40/I No.7A RDED SR (2002-03) | No | 16 | | | | 16 | 450.00 | 7200.00 |
| 13 | b) Thrust bearing block assembly complete with Segment bearing pad P.No.40/I No.7B RDED SR (2002-03) | No | 16 | | | | 16 | 950.00 | 15200.00 |
| 14 | c) Tip Carbon /Ferrodo pading P.No.40/I No.7C RDED SR (2002-03) | No | 16 | | | | 16 | 75.00 | 1200.00 |
| 15 | Bearing (Gun metal )Centrifugal cast Aluminium Bronze, bearing bush P.No.41/I No,9 RDED SR (2002-03) | No | 16 | | | | 16 | 375.00 | 6000.00 |
| 16 | Motor Base with pin P.No. 41/ I No.11 RDED SR (2002-03) | No | 25 | | | | 25 | 450.00 | 11250.00 |
| 17 | Re-erection charges of pumping machineries including overhauling and painting P.No.41/I No 13,RDED SR (2002-03) | No | 32 | | | | 32 | 850.00 | 27200.00 |
| 18 | Labour Charge (overhauling Motor only) P.No.41/ I No.15 RDED SR (2002-03) | No | 32 | | | | 32 | 450.00 | 14400.00 |
| 19 | C) Replacement of pump parts: The following main components of submersible pump sets requiring replacement Pump bowls P.No.39 / I No B1 RDED SR (2002-03) | No | 32 | | | | 32 | 145.00 | 4640.00 |
| 20 | Intermediate piece (I.P) with IP leaded bronze bush P.No. 44/ I No.B2 RDED SR (2002-03) | No | 32 | | | | 32 | 490.00 | 15680.00 |
| 21 | Oil seal P.No. 44/ I No.B3 RDED SR (2002-03) | No | 32 | | | | 32 | 22.00 | 704.00 |
| 22 | Oil seal steel bush P.No. 39/ I No.B4 RDED SR (2002-03) | No | 32 | | | | 32 | 75.00 | 2400.00 |
| 23 | Guide vane Pno 39/I No B5 RDED (2002-03) | No | 200 | | | | 200 | 178.00 | 35600.00 |
| 24 | Impeller (shell moulded with aluminium and Bonze ) P No 39/ I no B6 RDED SR 2002-03 | No | 200 | | | | 200 | 220.00 | 44000.00 |
| 25 | a) Discharge outlet (D.O) Bearing D.O Steel Bush P.No. 39/ I No.B7 RDED SR (2002-03) | No | 32 | | | | 32 | 435.00 | 13920.00 |
| 26 | b)D.O Bearing P.No. 39/ I No.B7 RDED SR (2002-03) | No | 32 | | | | 32 | 250.00 | 8000.00 |
| 27 | Steel bush (D.O) steel bush ) P.No. 39/ I No.B8 RDED SR (2002-03) | No | 32 | | | | 32 | 150.00 | 4800.00 |
| 28 | Allen Screw P.No. 40/ I No.9 RDED SR (2002-03) | No | 32 | | | | 32 | 25.00 | 800.00 |
| 29 | Pump shaft made out of stainless steel Centreless ground with key way (upto 8 stages) P.No. 40/ I No.10 RDED SR (2002-03) | No | 32 | | | | 32 | 950.00 | 30400.00 |
| 30 | Pump key (Stainless steel ) P.No. 40/ I No.11 RDED SR (2002-03) | No | 32 | | | | 32 | 125.00 | 4000.00 |
| 31 | Pump coupling (stainless steel ) P.No. 40/ I No.12RDED SR (2002-03) | No | 40 | | | | 40 | 250.00 | 10000.00 |
| 32 | Non - Return valve (NRV) assembly complete with rubber 'O' Ring P.No. 40/ I No.13RDED SR (2002-03) | No | 40 | | | | 40 | 1350.00 | 54000.00 |
| 33 | Cabble guard P.No. 40/ I No.14RDED SR (2002-03) | No | 40 | | | | 40 | 150.00 | 6000.00 |
| 34 | Strainer P.No. 40/ I No.15RDED SR (2002-03) | No | 40 | | | | 40 | 75.00 | 3000.00 |

| Sl No | Description of item | Unit | No | | | | Qty | Rate | Amount |
|---|---|---|---|---|---|---|---|---|---|
| 35 | Providing and fixing 50 mm dia heavy duty coller **SE RDED Approved rate** | No | 40 | | | | 40 | 116.00 | 4640.00 |
| 36 | Supplying and drawing 3 core flat PVC sheathed submersible pump cable manufactured with electrolytic grade copper with flexible copper conductor confirming to table 3 class 5 of IS:6130-1984 and virgin grade PVC insulation and sheathed suitable for working voltage upto 1100 Volts. P. No. 49/ I No. 29-b(1)4 Sqm mm of 36 strands 0.3mm dia Group - A KPWD Electrical SR 2010-11 | Mtrs | | | | | | | |
| | | | 5 | 200.00 | | | 1000 | 151.00 | 151000.00 |
| 37 | Supplying and fixing 20"x20"x2.5" polished wood board made of not less than 15mm thick plank on both sides with planks made out of not more than 2 pieces and fixing the same to the wall using tapered inverted wooden plugs screws etc. **P.No.30/ I No.2/f KPWD Electrical SR 2007-08** | No | | | | | | | |
| | | | 25 | | | | 25 | 275.00 | 6875.00 |
| 38 | Supplying of LTUG cable having aluminium conductor PVC insulated shelhed, galvanised steel, wire/ steel tap armoured cable with PVC outer sheathing 1.1KV class **P.No.67/I No.10(d) 4 core 16 sqmm KPWD Electrical SR 2007-08** | Mtrs | | | | | | | |
| | | | 1 | 200.00 | | | 200 | 150.00 | 30000.00 |
| 39 | Labour charges for laying of 1.1KV class UG cable (PWD Electrical SR-1999-2000,P-68/I.No.11a) **KPWD Electrical SR 2007-08** | Mtrs | | | | | | | |
| | | | 1 | 200.00 | | | 200 | 5.00 | 1000.00 |
| 40 | Digging or trenching of 0.6mx 0.5 m wide refilling the trench to the required ground level and consolidating etc. complete as per Civil SR KSRB 1-2 P-7 **P.NO.68/ I No. 12-d KPWD Electrical SR 2007-08** | Mtrs | | | | | | | |
| | | | 1 | 150.00 | | | 150 | 60.00 | 9000.00 |
| 41 | Supplying and fixing of class A (meaium duty ) GI pipe of wall thickness not less than 3.25 mm on pole/wall/drain crossing with necessary clamping arrengements for UG cable of 1.1KV class **P.No. 69/I.No 15-A KPWD Electrical SR 2007-08** | Mtrs | | | | | | | |
| | | | 10 | 4.00 | | | 40 | 220.00 | 8800.00 |
| 42 | Supplying and fixing L T cast Iron pot head suitable for 1.1 KV class UG cable filled with necessary bitumen/ insulating compound complete with terminals clamps, bolts, nuts, and washers etc P.No,69/I No.16-b **KPWD Electrical SR 2007-08** | No | | | | | | | |
| | | | 25 | | | | 25 | 240.00 | 6000.00 |

| Sr No | Description of item | Unit | No | | | | Qty | Rate | Amount |
|---|---|---|---|---|---|---|---|---|---|
| 43 | Fabrication supplying and mounting MS box of 16 SWG suitable for floor /wall mounting, fully weather proof with provision for better heat dissipation, provided with hinged front cover, equipped with tamper proof locking arrangements, with suitable size clamps with necessary cable entry pipe with gland and box should be finished 2 coats of red oxide primer paint and finally finished with approved colour enamelled metal paint etc., complete box of 21600 sqcm @ Rs.0.33 **P.No. 41, I. No. 38B KPWD Electrical SR 2010-11** | Sq.Cm | | | | | | | |
| | 16SWG | 2x6 | 12 | 120.00 | 60.00 | | 86400.00 | | |
| | | | 6 | 410.00 | 25.00 | | 61500.00 | | |
| | | | | | | | 147900.00 | 0.33 | 48807.00 |
| 44 | Supply and delivery at site brand new star / Essen/ Lotus/sun shines/ Adrash/ GK controls best indigenous make combined energy meter cum control panel board unit of size 600x450x200mm minimum mechanically strong vermin and water proof. The unit shall have two detachable doors suitable for operation on 3 Ph, 50 Jz 380/440 volts, A.C supply with spring loaded latch, locking deveice with a key ribs should be provided inside the door canopy apron and louvers ventilators shall be provided. the combined energy meter cum control panel board unit suitable for operation. The panel board shall be fabricated on single unit in the above components for suitabl pump set.**10HP 20 stage with star /Delta starter P.No SE RDED Approved rate** | No | | | | | | | |
| | | | 3 | | | | 3 | 7000.00 | 21000.00 |
| 45 | KSRB 13.6.3-6: Providing and fixing in position brass gate valve with C.I wheel of approved quality (screwed end ) 50mm nominal bore including cost of al materials labour and HOM of equipments with all leads complete as pe specifications. Specification No.**KBS13.2.6/13.3(P.No.97/I.No.13.37 PWD SR 2012-13)** | each | | | | | | | |
| | | | 36 | | | | 36 | 1612.44 | 58048.00 |
| | Basic rate | 1493 | | | | | | | |
| | Area Weightage @ 8% | 119.44 | | | | | | | |
| | Total | **1612.44** | | | | | | | |
| 46 | Earth work excavation for pipe line trenches including depositing on bank upto a lead of 50 meters including shoring and stutting danger lighting and using sight rails and boning rods at every 100 mtrs wherever necessary as directed in the following strata manual means in hard soil PRED SR 2010-11 page No 1 item No 1.2.2 | cum | | | | | | | |
| | | | 1 | 1900.00 | 0.45 | 0.9 | 769.50 | | |
| | | | | | | | 769.50 | 202.00 | 155439.00 |

| Sl No | Description of item | Unit | No | | | | Qty | Rate | Amount |
|---|---|---|---|---|---|---|---|---|---|
| 47 | Providing and installation at site of works P.V.C pipes including cost of pipes and specials and including lowring into trenches laying true to line level nad perfect linking at joints leak proof alround to a depth Not less than 15cm with grave or selected earth available form the excavation etc. **Page,No 3 I No 4.2 PRE SR 2006-07** | Rmtr | | | | | | | |
| | 75mm dia 6KSC PVC pipe | | 1 | 950.00 | | | 950 | 117.00 | 111150.00 |
| | | | | | | | | | |
| | 63mm dia 6 KSC | | 1 | 950.00 | | | 950 | 88.00 | 83600.00 |
| | | | | | | | | | |
| 48 | Refilling the basement and pipeline trenches with selected available earth from trench excavation including watering consolidation in layers of 15 cm thick including disposing of the surplus earth with a lead of 200 meters | cum | | | | | | | |
| | | Qty same as item No 46 | | | | | 769.50 | 58.00 | 44631.00 |
| | | | | | | | | | |
| | | | | | | | | | |
| 49 | Miscellaneous and Unforeseen Charges | L/S | | | | | | | 2516.00 |
| | | | | | | | | | |
| | | | | | | | | Total | 1500000.00 |

(Rupees Fifteen Lakhs Only)

CERTIFICATE :

1 The work spot has been inspected and the work is found necessary.
2 This estimate is prepared as per C.S.R. of PWD 2012-13, PWD Electrical 2010-11, PRED 2010-11 & SE-RDED
3 The provisions were made in this estimate are necessary and adequate.
4 This works come under B.B.M.P. limits.

Ramanjaneya
Assistant Engineer

Assistant Executive Engineer
Yelahanka Sub Division
Bangalore-64

Executive Engineer
Yelahanka Division
Bangalore-64

ADMINISTRATIVELY SANCTIONED FOR Rs 15.00 Lakh
Rupees Fifteen Lakh only
Under P-1771 General works
Registered as EE ( ) No 99
Subject to conditions contained in enclosed memo EE ( ) No 99
Dt Estimate A/Sanctioned
S.C.J/EE/ /13-14 No
dated 30-10-13 Rs 15.00 Lakh

Ramu
Joint Commissioner
(Yelahanka Zone)
BBMP, Bengaluru-92

TECHNICALLY SANCTIONED FOR Rs. 15.00 Lakh
Rupees Fifteen Lakh only
Under P-1771 General works
Registered as CE ( ) No. 99
Subject to conditions contained in enclosed memo EE ( ) No. 99
Dt Estimate A/ Sanctioned
EE/YNK/T.S/ /13-14 No
Dated 30-10-13 Rs. 15.00 Lakh

Executive Engineer
31/10/13